

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(pursuant to NAC 445A.236)

Permittee Name: Sunrise Colony
9901 Covington Cross, Suite 120
Las Vegas, Nevada 89134
for the

Location: Red Rock Country Club Golf Course
2250A Red Springs Drive
Las Vegas, Nevada 89134 - Clark County

Latitude: 36° 07' 46"N; Longitude: 115° 20' 34"W
Section 11, 14, T.21 South, R.59 East MDB&M

Permit Number: NEV2002517

General: The Red Rock Country Club Golf Course will receive tertiary treated nitrified disinfected effluent for reuse irrigation supplied by the Desert Breeze Water Resource Center (DBWRC #NEV2002509) of the Clark County Water Reclamation District (CCWRD). The reclaimed water will be used for spray irrigation of the 100 acres of turf grasses on the fairways and roughs, and 8.5 acres of tees and greens, with the balance in drip irrigation of areas of landscape trees and shrubs to total over approximately 110 acres scattered throughout the golf course. The course has been retrofitted for reuse irrigation. The DBWRC reclaimed (reuse) water will be blended in Lake #5 with potable water provided and managed by the Las Vegas Valley Water District to provide the course with the required volume of water required. The relative percentages of potable and reclaimed water will vary with the seasonal irrigation demand. A transfer pump station pumps reuse irrigation water up to Lake # 18 from Lake # 5; Lake # 5 irrigates 40% of the course and lake # 18 which is about 100' higher in elevation than Lake #5, irrigates 60% of the course. Lake # 5 is hydraulically connected to Lake # 7 by a 15" pipe which is isolated by a valve kept in a closed position. This valve would only be opened if there was an irrigation emergency, and it could provide additional water to Lake # 5 for irrigation. All six Red Rock lakes have ultra violet -ozonation aeration systems installed which provide a minimum of twenty turnovers of each lake in a 24 hour period to maintain lake clarity and water quality.

Receiving Water Characteristics: Groundwater in the vicinity of the course is approximately 800 -900 feet below ground surface with groundwater flow direction to the east-southeast. The deep aquifer meets drinking water standards. Due to the depth to groundwater, monitoring wells at the course will not be required.

Description of the Location of the Discharge: This golf course has 18 greens, with tees and fairways and the adjacent course landscaping. The clubhouse is located at 10575 Siena Monte Avenue, in Las Vegas, Clark County, Nevada, and is situated above and overlooking Lake #1 West and Lake #1 East and the connecting waterfall water features in between. The pump station at Lake # 9 supplies irrigation water to the course irrigation system.

Flow: The permitted 30-day ave. flow is 0.719 MGD, and the max. daily flow is 1.69 MGD which is the maximum anticipated amount for the hot summer months. Flows are measured at the reclaimed and the potable water metering vaults via six inch magnetic flow meters. Initially, the blend of reclaimed and potable water will be about 50-50.

Procedures for Public Comment: The Notice of the Division's intent to issue a permit authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit is being sent to the **Las Vegas Review-Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a 30 day period following the date of the public notice, by September 10, 2003. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period, and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Discharge Limitations: As noted in Table I.1 below, the DBWRC will be providing the course with a high quality disinfected reclaim water to the golf course. The Total Coliform requirement is set at 2.2 CFU or MPN/100 ml, 30-day average. Therefore, in accordance with NAC 445A.277, a buffer zone and control of public access are not required.

TABLE I.1: Discharge Limitations

PARAMETERS	<u>EFFLUENT DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	30 Day Ave.	Daily Max.	Measurement Frequency	Sample Type
Flow:	0.719 MGD	1.69 MGD	Continuous	Flow meter
Total Coliform:	2.2 CFU or MPN/100 ml	23 CFU or MPN/100 ml	Weekly	Discrete
Total Nitrogen as N: ⁽¹⁾	Monitor and Report mg/L		Monthly	Calculate
Total Kjeldahl Nitrogen as N:	Monitor and Report mg/L		Monthly	Composite
Total Oxidized Nitrogen as N: (Nitrate + Nitrite)	Monitor and Report mg/L		Monthly	Composite
Ammonia as N:	Monitor and Report mg/L		Monthly	Composite
Total Nitrogen lbs/ac/year:	220 lbs/ac/year See Part I.B.4.		4th Quarter	Calculate

(1) Total Nitrogen as N can be reported as the sum of Total Oxidized Nitrogen and Total Kjeldahl Nitrogen

CFU = Colony Forming Unit; MPN = Most Probable Number

The quality of the effluent used by the Permittee may be reported as calculated values based upon the blend of treated effluent and Las Vegas Valley Water District (LVVWD) water.

Monitoring requirements may be satisfied by data collected by the Desert Breeze Water Resource Center and the LVVWD. Discharge Monitoring Reports are to be submitted by the Permittee. Copies of backup data or water quality calculation summaries are to be maintained at the golf course reuse site.

Schedule of Compliance: The Permittee shall implement and comply with the provisions of the following schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the Schedule of Compliance.

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a. The Permittee shall achieve compliance with the discharge limitations upon issuance of the permit;

b. The Permittee, or its designated representative, shall adequately address all comments and concerns relating to the Division's review of the EMP. **The Permittee shall not reuse treated effluent prior to having an approved Final EMP per NAC 445A.275;** and

c. **All compliance deliverables shall be submitted to Mr. Nadir Sous, NDEP-LV, 1771 East Flamingo Road, Suite 121-A, Las Vegas, Nevada 89119.**

Rationale for Permit Requirements: Reclaimed water monitoring is required to assess the level of treatment being provided by the DBWRC, to assess the quality of blended water delivered to the course by the LVVWD, to assess the management of recycled water usage, and to protect the local groundwater quality. Total Coliform and nitrogen species are required for monitoring the quality of reclaim water being applied, and for protection of human health and the environment.

Determination: The Division has made the determination to issue the proposed permit for a five-year(5) period.

Prepared by: Icyl C. Mulligan, ES MS
July 2003